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Original Articles.

PROFESSOR PASTEUR'S EXPERIMENTS.

BACTERIA IN VARIOUS DISEASES.

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The following paper was suggested by reading, in a recent number of a medical journal, a synopsis of Prof. Pasteur's paper upon "Vaccination in relation to Chicken Cholera and Splenic Fever;" as delivered by him before the late International Medical Congress in London.

But before the reader can see and appreciate the full force and bearing of what is to follow, he must first know something of the essential facts in the Professor's experiments, (if not already familiar with them) and his deductions therefrom, which are given in a condensed form below.

Prof. Pasteur first inoculates healthy chickens, each with the tiniest drop of the blood of another chicken, about to die of chicken cholera, to show the great virulence of that poison. The result is, of course, that the disease is communicated to the healthy fowls and speedy death follows to every chicken so inoculated.

Next he prepares some broth from a healthy chicken, and fills a great number of small vases, or vials, with this broth, and numbers them, say from one to a hundred, or even to a thousand; then he dips the end of a very delicate glass rod into the blood of a chicken suffering from chicken cholera, and charges the broth in No. 1 vial with the minute drop of blood on the point of the glass rod. "In a short time," he says, "you will see the liquid," in that vial, "become turbid and full of tiny *microbes*." Now, "take from this vase," or from No. 1 vial, "a drop as small as you please, no more than can be carried on the point of a glass rod as sharp as a needle, and touch with this point a fresh quantity" of broth; that is, the broth in No. 2 vial, and precisely the same result follows to it that did to that in No. 1 vial, to which the drop of diseased blood was added—it also becoming "turbid and full of tiny *microbes*." Then take as minute a drop from this second vial, and transfer it to a third vial of broth, and the same from the third to charge the fourth, from the fourth to the fifth, and so on as high as you may go the result is the same. Or, in the words of Prof. Pasteur: "You deal in the same way with a third culture-vase, with a fourth, and so on to a hundred or even to a thousand, and invariably, within a few hours, the culture-liquid becomes turbid and filled with the same minute organisms."

And now we come to the most astounding part of all the results of his work, namely: That a healthy chicken inoculated with broth from the hundredth or thousandth vial so treated, will die as quickly and with the same symptoms as one inoculated with the fresh blood of the disease Or, to give his exact language again, that there may be no question as to his assertions: "Let us take one of our series of preparations—the hundredth or the thousandth for instance—and compare it, in respect to its virulence, with the blood of a fowl which has died of cholera; in other words, let us inoculate under the skin of ten fowls, for instance, each with a tiny drop of infectious blood, and ten others with a similar quantity of the liquid in which the deposit has first been shaken up; strange to say, the last ten fowls will die as quickly, and with the same symptoms as the former ten; the blood of all will be found to contain, after death,

the same minute infectious organisms." Upon the question as to what these alleged "minute infectious organisms" are, rests much of the real science of this whole subject, as we shall see further on, but it will be better, or more instructive, to clear up one or two other points before proceeding to that.

What has been quoted and said above relates wholly, as will be seen, to the inoculation and death to all fowls so dealt with, whether with the fresh and undiluted blood, or with the hundreth or thousandth successive dilution, or attenuation of that. Now comes up the question of vaccination and *prevention* of the disease, with broth treated, or charged in a similar manner with the same virus, with this difference and this only in manipulating it, namely; that he allows a fortnight or more to elapse between the charging of one vial, and that of the next from that, and so on. By taking this course, or allowing such an interval of time between the charging of each of several successive vials, he modifies the deadly poison of this virus, and finally converts it into a great prophylactic, the vaccination of healthy fowls with which, will prevent them from taking the disease, in every case, as effectually as ordinary vaccine prevents small-pox.

He pursues a similar course with the virus of splenic fever, in successive vials of broth, which destroys every animal inoculated with it, in however high a dilution, the same as the blood of the disease itself, and as is the case in chicken cholera; unless he allows quite an interval of time to elapse between several successive dilutions, in which case it also is converted into a prophylactic against that fever, and so prevents the disease in every animal, whether horses, sheep, or cattle, vaccinated with it. And, in France alone, he claims that twenty million francs will be saved annually in the value of live stock by it.

Now, one point more and we are then ready for the summing up of the whole subject. Whether inoculating with the fresh diseased blood, or the deadly diluted virus prepared from it; or whether vaccinating with that which has been manipulated into a prophylactic, from the latter, by the process described, one specific result follows

in all cases, whatever else may come; and that is, the development of "microbes," in great numbers, in the part inoculated, or vaccinated, and in the animal's blood throughout the whole system, as well—though probably in much greater numbers, in case of inoculation with the deadly virus, than in vaccinating with the prophylactic, but this point is not clearly stated.

This brings us then to one of the most important of all questions, for a better and more scientific understanding of this subject, and that is: What are these microbes? Prof. Pasteur says they are living organisms, bacteria, or vegetable parasites, and all investigators and writers, not only upon these diseases, but on diphtheria as well, assert the same. But have not all such observers overlooked one *ever-present* and very important fact in all these and similar cases, and that the fact, that in every instance where blood congests, as the result of their inoculation, the *fibrin* in the blood of the *animal inoculated* commences at once, or soon, to coagulate, locally at first, and then more or less throughout the whole system, into minute granules as the result of the poison introduced; and that these minute granules of fibrin have been mistaken by them for living organisms, or vegetable parasites? Let us consider the following facts and see:

Everything in nature begets its kind. This is an axiom that none will deny. So constant and universal indeed, is it, that with many things which cannot beget their kind, properly speaking, nevertheless *induce* their kind. The least particle of the coagulum of sour milk, for instance, added to fresh, sweet milk, begins at once the work that soon leads to the coagulation of that. The particle of the coagulum introduced does not in and of itself grow, or multiply indefinitely, but simply induces the change in the corresponding element, caseine, of the fresh milk, that originally led to its own coagulation. Consider, also, in this connection, a few facts about pus-poisoning or pyæmia. A small quantity of pus, or of pus-corpuscles, taken up by or introduced into the blood and general circulation leads to the formation and deposit of pus in many parts of the system, that is, causes pyæmia; but the pus-corpuscles taken up do not beget the other pus-corpuscles that follow, but they induce

them; that is, set up a morbid action that leads to the decolorization of red blood-corpuscles, and their change into pus-corpuscles in a similar way to that by which other red corpuscles had been decolorized to make the pus-corpuscles first introduced. This general fact of things inducing their kind, might be enlarged upon almost *ad infinitum* in every department of nature, but let us here confine it to one specific result in disease.

The particles, molecular granules and fibrils, of coagulating fibrin, (which have been mistakenly called bacteria), when added to a fluid like the broth, or the blood, that holds other fibrin in solution in it, induces a coagulation of the fibrin in that broth, or blood. The added particles of fibrin do not grow or multiply of themselves, in such enormous numbers as claimed for bacteria, nor at all. They simply induce the like change (coagulation), they had themselves previously undergone, in their like substance, the fibrin of the blood, or broth, to which they are added. This fact is here applied, it should be understood, either to the inoculation into the blood of healthy animals, some of the blood from diseased animals (or some vitiated broth,) that contains coagulating particles of fibrin; or to the treating of the juices or broths from the flesh of healthy animals, by the diseased blood, or vitiated broth, after those juices have been manipulated by heat so as to prevent the fibrin in them from coagulating naturally.

That such are the *facts* in regard to coagulated particles of fibrin, inducing other fibrin, held in solution in any fluid, to also coagulate, is shown by the following from Carpenter's Physiology, page 60, where, in speaking upon the fibrillation of fibrin, he says:

"This *fibrillation* seems to bear a certain analogy to crystallization, being the result of forces which tend to withdraw the solid particles from their state of solution in the liquid, and to bring them together in a certain definite mode of aggregation; and there are certain peculiarities in the process which to some extent bear out this analogy. Thus, just as crystals will form around a nucleus of the same kind, from a solution which *would not otherwise have deposited them*, so will a fibrinous coagulum often separate from a serous fluid, and form around a piece of washed clot of blood, or of the buffy coat, or of muscle or some other animal tissue placed in it, although the fluid (such as that of hydrocele) *would not have otherwise shown any disposition to coagulate.*" (The italics are our own to show more distinctly the facts in this respect as they stand.)

The remarkable persistency in the coagulating power of fibrin, whenever, and so long as any of it remains in solution in any fluid, may be seen from the following from Virchow's Cellular Pathology, page 192:

"In many forms of pleurisy the exudation long remains fluid, and a number of years ago a peculiar case came under my notice, in which, on puncturing the thorax, a liquid was evacuated which was perfectly clear and fluid, but in a short time after its evacuation had its whole mass pervaded by a coagulum, as is often the case with fluids from the abdominal cavity. After I had removed this coagulum from the liquid by stirring it, in order to convince myself of its identity with ordinary fibrin, the next day a fresh coagulum displayed itself, and this took place also on the following days. This coagulative power lasted fourteen days, although the operation had been performed in the midst of the heat of summer."

This shows what a remarkable thing coagulating fibrin is, and especially in connection with disease or diseased fluids.

Again, it should be borne in mind, that the molecular granules, the fibrils and spirals of coagulating fibrin, are, in their every appearance, and under all circumstances, precisely like the three classified forms* of bacteria, spherical, rod-like and spiral, (the microscope has never pointed out the slightest distinction between them), and that they occupy the same positions and demean themselves in precisely the same manner wherever found.

Therefore, if Prof. Pasteur will repeat his highly important experiments, recently reported in London, and while doing so, keep well in view the foregoing great facts, he will no doubt be led to revise his conclusions, from seeing that his microbes, or bacteria, of chicken cholera, and of splenic fever, are simply coagulated particles of fibrin in the blood of the diseased animals, and that those caused in healthy animals by their inoculation with such blood, are also nothing but coagulating particles of the fibrin of their blood—the coagulation thereof being simply induced in the healthy animal by the

* From carefully reading numerous authors upon bacteria, I am confident that many, if not all of them, have also included in their lists of bacteria, (but outside of the three "classified forms," named above, which are the three stages of coagulating fibrin) colored blood-corpuscles that have been *decolorized* by disease, but more especially the numerous granules that such decolorized corpuscles are constantly breaking up into, or bursting and thereby releasing, in connection with every disease where "bacteria" are found.

like matter, coagulated fibrin, in the diseased animal's blood, introduced by the inoculation.

The power of diseased or dead animal matter, to compel the coagulation of fibrin, even in the living body, may be seen by the following from Carpenter, page 197:

"Again, the contact of dead animal matter with the blood, appears to promote the coagulation of its fibrin in a very remarkable degree; occasioning *coagula to form* whilst it is *yet actively moving* in the *vessels of the living body.* Thus, M. Dupuy found that the injection of cerebral* substance into the veins of an animal occasioned its death almost as instantaneously as if prussic acid had been administered; the circulation being rapidly brought to a stand by the formation of voluminous clots in the heart and large vessels. These experiments were repeated and confirmed by M. de Blainville. The same effect is produced with *still more potency* when the substance injected is rather *undergoing degredation* than actually dead. (The italics here also our own.)

If, then, a little healthy brain substance injected into the veins, will kill as quickly as a dose of prussic acid, by forming "voluminous clots" of fibrin in the blood; and if any animal matter, "undergoing degredation," though not yet dead, is still more powerful in this respect, we can better see and understand the power which the blood of a diseased animal (that already contains coagulating fibrin), must have in coagulating the fibrin in the blood of a healthy animal, inoculated with it.

In speaking of inflammation, and the exudation and organization of fibrin in connection therewith, Wood, vol. 1, page 28, says:

"As it first escapes it is a homogeneous, formless, transparent fluid; but very soon afterwards, if examined by the microscope, it is found to contain *multitudes of fibrils*," and "*great numbers of minute granules* of different sizes." (Italics ours.)

Lehman, vol. 1, page 312, speaking of the coagulation of fibrin under various circumstances, says:

"The same process goes on *within the vessels of the living organism, as soon as the blood ceases to circulate.*" (Italics ours.)

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*"There is no reason to suppose that cerebral substance possesses a more special influence than would be exerted by any other tissue which could be as easily mixed up with the circulating current."—NOTE, BY CARPENTER.

And, under *all* circumstances, when fibrin coagulates, it organizes first into "*great* numbers of granules," and these join together to form "multitudes of fibrils."

Therefore, of one thing, all may be assured, and that is, in the inflammation excited in any part by inoculation with any, or especially with poisonous or diseased matter, there are always found in that part great, if not almost innumerable, numbers of very minute coagulated or molecular granules of fibrin; and it therefore becomes the duty of Prof. Pasteur to point out the clearest and most unmistakable distinctions between these and his so-called bacteria, which are claimed to occupy the same parts, and something of the proportions of each, in the part, or we are fully warranted in assuming that all the latter are simply nothing more than particles of organized fibrin, coagulated there by the poison, or by the inflammation, as the case may be. He assumes and asserts the presence of an *unnatural* and *foreign* element, *vegetable* organisms, in the blood, etc., without clear proof that they are such, while we can positively assert and *prove* the actual presence of a *normal* element, fibrin, there, but morbidly changed, that is, coagulated into minute particles, by the inoculating poison, or by the inflammation which that excites. Therefore, I repeat, the burden of proof lies wholly with him to make good his unnatural claim, or the natural *fact* must and should take its place.

Fibrin is in excess in the blood in cholera and in splenic fever, as it is in diphtheria, and as soon as that excess becomes at all pronounced, it commences to coagulate into molecular granules and fibrils in the blood of those diseases, just as it does in diphtheria; hence, when ever so little of that blood is introduced into healthy blood it induces more or less of the like change in that, as already sufficiently shown; and *not* the growth of vegetable parasites, as claimed, in realms where vegetable life does not exist and could not live.

And all this enforces another important lesson upon the fact already claimed, namely, that everything must produce its kind. Inoculation with the blood, or the microbes, or the bacteria, that is,

with the coagulating particles of fibrin of chicken cholera, will *not* produce splenic fever, or diphtheria, nor will the inoculation with the alleged bacteria of splenic fever produce either diphtheria or chicken cholera, nor those of diphtheria either of the other diseases, but each its exact kind and that only.

And, per force, vaccination with the microbic grafts, that is, with the manipulated, or many-times-re-induced particles of coagulated fibrin, from either of these diseases, cannot prevent one of the others, any more than can the manipulated virus of small-pox prevent measles, or vice versa; which throws us back upon the same fact, still again, that each virus produces, or is a prophylactic against, (as the case may be,) its own exact kind, and nothing else; and leads to the only other rational conclusion, namely, that these particles of fibrin carry with them the contagious principle of the disease into the blood of the healthy animal, as a separate and immaterial, or dynamic force, or poison, clinging to, or in some way associated with them, and which is the cause of all the other results.

On the contrary, if all these germs, microbes, or bacteria, so-called, were vegetable parasites as claimed, and so exactly alike* as asserted, they should all produce the same or very similar results, or diseases, —those of chicken cholera causing indiscriminately that, or diphtheria, or splenic fever, or either of these latter chicken cholera, which is *never* in the slightest degree the case. Or, rather, were they all vegetable and exactly alike, or belonging to the same closely related family, as they must, if they were that, it is impossible to see how there could be any difference that would be discernible in their effects. But being coagulated particles of fibrin and herein exactly alike, they may and do induce their exact kind in causing other fibrin to coagulate, but there the similarity stops, and still leaves the specific dynamic force, or poison of each disease, to be accounted for, which, as already said, they in some way carry along

* "I will not trouble you with any attempt to describe the differences which these organisms present, for subsequent experience has shown that the *most deadly* may be *undistinguishable* from the *most harmless*, by any *detectable physical peculiarity*." (Italics ours.)

Extract from address by Charles Cameron, M. D., LL. D., M. P., President of the Section, delivered in the Health Department of the Social Science Congress.

with them, and which every time produces its own specific results, and those only, whether of diphtheria, cholera, splenic fever or other contagious disease.

Organized fibrin, too, is one of the most indestructable of all the soft tissues, nothing but bone exceeding its qualities in this respect. Thus, "Mr. Hatchett macerated three pounds of muscle, cut into thin pieces, for fifteen days in cold water, changed every day, pressure being also applied; he afterwards *boiled* it for *five hours every day* for *three weeks*, changing the water as before; and finally it was pressed and dried by the heat of a water bath;" and all this in order to get a pure specimen of fibrin. Hence, is it surprising that Prof. Pasteur found, as he says, his deadly "microbes," (coagulated particles of fibrin), in pits where animals dead from splenic fever had been buried several years? And is there anything *vegetable*, in so minute a form, that would last so long buried in the ground, and under the heat, moisture and frosts of the changing seasons.

The presentation of this subject here, or in this manner, must not be understood as being done to obtrude mere individual opinions, or as captious criticism, as it is neither. It is simply presenting a connected series of *scientific* facts, of which there are many more, which should and *must* have a hearing before we can settle upon the true nature of diphtheria, or of the other diseases named.

Is it not a little suggestive that Prof. Pasteur's microbes require the same action of oxygen, or exposure to the air, to develop them, that is required by fibrin to coagulate it, as seen in drawn blood, and in dropsical fluids, containing fibrin?

"Without oxygen, bacteria cannot live," says Prof. Bollinger, another high authority. Without oxygen fibrin cannot coagulate,* I respond, as we see in dropsical effusions into the chest, abdomen, etc., where neither air nor even the oxygen of the blood can reach them, and they do not coagulate until exposed to the air, then they do.

* Even in those cases, cited by Carpenter, where other materials than oxygen were used to coagulate the fibrin, there was exposure to the air also as a part of the process, excepting when it was coagulated in the vessels of the living body, and here certainly there was the oxygen in the blood to aid in the work, as there is in all cases of inoculation; so it may be that oxygen is always one of the requisites to such coagulation, though whether this be true or not, it does not destroy, or even disturb any of the other facts.

"The whole development of these organisms, and especially the formation of spores, is completed on the surface of the fluids, and under the influence of an abundant supply of oxygen," says Prof. Klebs, in speaking of baccilla, or rod-like bacteria. Fibrin commences its coagulation on the surface of fluids that contain it, I answer; and so look where we may the comparisons and similarities are complete.

In saying all this, I would not detract one jot or tittle from the greatness of Professor Pasteur's work, nor from its economic results in saving so many millions of dollars annually in value of live stock, as it probably will, if all he claims is true; and certainly would not detract from the equally other important proof that he furnishes that the hundredth, yea the thousandth, graft, attenuation, or potency of this virus, is equally virulent and deadly to *every* inoculated animal, as is the fresh diseased blood.

Would to Heaven there were thousands and tens of thousands more of such great minds and great workers in medicine, and we would then soon make of our profession the noble and complete science that it should, and ultimately will be; instead of the miserable jargon of inconsistencies, contradictions and animosities that it now is.

LOW TEMPERATURE.

BY H. F. GILLETTE, M. D., CUBA, N. Y.

The following case was of interest to me, and I report it thinking it may be to the readers of the INVESTIGATOR. It was that of a young man whom I was called to see Friday, October 28, 1881. The history of the case showed that for three weeks previous he had been troubled with chills and flashes of heat; was dizzy all the time; appetite poor; loss of memory; slight delirium for a few nights past; temperature, 102°; pulse, 112; tongue dry, with dark brown coating, excepting at the point. I left him gelsemium ℞, and baptisia ℞. Same day, 8 P. M., temperature, 103½; pulse, 112.

Saturday, 8 A. M. Passed a very restless night, with active delirium; tongue, smoothe, dry and glassy; temperature, 103½ and pulse, 115.

Left rhus. 2x and baptisia ℄. At 8 P. M., temperature was 105°; pulse, 120; sordes; twitching of tendons; bowels moving every hour; tympanitis and much pain in the bowels; continued rhus. and bap., and ordered cold applications by sponging freely.

Sunday, 8 A. M. Temperature 98°; pulse, 80; cold sweat upon face; had to awaken patient; lies in a stupor all the time; left arsenicum 3x, and carb. veg. 3x.; put hot bottles about the patient and gave brandy every hour. 8 P. M. Temperature, 96°, and patient not much changed otherwise; continued same treatment. Re-action came on at midnight when temperature went up to 104½°; pulse, 110; tongue, moist; patient's mind, clear.

Monday, 10 A. M. Temperature, 101½°; pulse, 85. Patient improved rapidly and is now discharged.

November 8, 1881.

Correspondence.

GOING ABROAD.

MR. EDITOR:

As we can hardly pick up a newspaper, these days, without reading of some of our doctors who have gone to Europe to spend two or three months to "*complete*" their medical education, and as it has become apparent that the teachings in Boston, New York and Philadelphia are crude and not adapted to the wants of the "*polished*" physician, your correspondent concluded that he, too, must take a trip or else he could not hope to maintain the position that he already held in his professional standing, or gain further eminence. He found that this must be done, also, in order that he could get *free advertising* without violating the "Code of Medical Ethics." He also went in the hope of seeing something more than he had ever seen before, of possibly witnessing a case of typhus or typhoid fever a *little different*, or possibly cases of measles or whooping cough, sufficiently severe to "make each particular hair stand on end, like quills on the dreadful porcupine." He did not expect

to gain any knowledge of *treatment* that was new or strange, for he could read all that from the various medical works of the day; but he desired that the world should know that he "had been *abroad*, ABROAD." He *must* have the satisfaction of saying to his suffering patients, who where lifting their suplicating eyes to his, and pleading for relief,—"When I was abroad!" How it tells! How pain vanishes at these magic words! How hope is enkindled! And, if Death should lay his icy fingers on the sufferer, hear the sigh of relief from the stricken friends as they repeat, "Well, the doctor has been abroad,—so all was done that could be,—his time had come."

In order, however, that the people in this vicinity should *know* that your correspondent *was* abroad, he established communications with friends, so that once or twice in each week, and most emphatically on Sunday, his whereabouts should be proclaimed in the papers. This would not be advertising, or if it should be, there would be no violation of the "code." All this being fixed he proceeded directly to Tonawanda, in the state of New York; there he discovered some rare cases of intermittent fever. One man fell down in a state of unconsciousness, kicked and died. The doctors stated that this was a case of "Febris Intermittens Hamburghii Canalii." No such case has ever been witnessed in the old world by that name. This was a new point and worthy of note. Two hours from that time the writer was landed on the wharf of the famous town of Lockport, after a very tempestuous voyage over the turbulent waters of the Erie canal. This town is famed for its wonderful works of masonry and small pox,—considerable of the former and a little of the latter. Here he found that persons who had been vaccinated and thoroughly protected from small pox would not contract the disease, and some, who were *not* protected, would be liable to have it, should they be exposed; while those who were not exposed might possibly escape. He hopes that he has made himself clear in the above statement, for it is a matter which has cost much study. Being a little skeptical in regard to the scar on his own arm, he left for Olcott on the earliest pedestrian train. This town is on the shores of the beautiful lake Erie, famous for the great battle once fought on its

waters by a gentleman by the name of Perry, and some others. As the inhabitants were very healthy here, only a short stop was made. The next port of entry was Niagara Falls. where your correspondent had an excellent opportunity for studying *water*. It is a powerful agent. It is surprising what wonderful effects it has as an external application. If applied here in one way, it kills man or beast in a very few minutes; and it has been known to cause grave apprehensions when taken into the stomach of the uninitiated. Looking at these waters usually suffices.

In this rambling in foreign parts, he learned how to extract teeth without pain, and so proclaimed it. A gentleman came into his office to have an aching molar extracted. After "yanking" the individual all over the room and into the hall, he fell over the bannister, and as your servant was the heaviest he remained with the tooth upstairs. The patient left without *paying*. That may seem far-fetched, but if any one will bring in the dollar, the pun will be explained. Another secret was developed. A physician must get into the good graces of a newspaper reporter, visit him daily and give him all the items of minor surgery, and have his name put in as having been called; this does not violate the "code." If he leaves town for any operation, or to visit his aunt, mother or any other Pinafore folks, have it put in the papers so that his name will be kept before the people and violate no code.

Mr. Editor, your correspondent would teach you more, but he is afraid you will be "engorged" now from what has already been communicated. Yours truly,

DR. I. P. F. J. SNOW, A. M., M. D.

[PRIVATE.]

MR. EDITOR:—I would pay for inserting the above in your JOURNAL, but the "Medical Code" prohibits any physician in "*regular*" standing doing so. All he can "*sponge* out of you folks" is "legitimate" work. I would also say that I would send you more of my professional observations from abroad, but the fact is, nearly all my time was employed in attending theaters, operas and general sight-seeing, but do not expose me, please. It tells just as well.

DR. S., A. M., M. D.

Selections and Abstracts.

INDICATIONS FOR THE TREATMENT OF NASO-PHARYNGEAL CATARRH.

These are well stated by Dr. A. H. Smith [*Med. Record*, August 6, 1881]. [1] Keep the parts clean. [2] Remove all sources of irritation resulting from occupation, residence, climate, etc. [3] Enforce attention to hygiene and to the general health. [4] If there is obstruction to nasal breathing, remove the obstruction. [5] If there is ulceration, use strictly local applications, with a view to healing. [6] If there is hypertrophied glandular stricture yielding excessive secretion, remove the hypertrophied portion. [7] If, after the above indications have been fulfilled, there is still hyperæmia, use mild astringents and sedatives and such constitutional treatment as is thought to be indicated. [8] Cease treatment the moment there is no longer a definite indication for it.

As to the first three indications, the reason for them is too obvious to require comment. The fourth indication, relating to obstruction to nasal breathing, is of very great importance, chiefly, as I think, for a reason which I believe has not heretofore been brought forward. I refer to the effect of nasal stenosis in causing hyperæmia of the membrane behind it, owing to the rarefaction of the air with each inspiration. The influence of this diminished air-pressure behind the obstruction upon the development of the bony and cartilaginous structures of the nose in early life has lately been insisted upon by Dr. Roe, but he has overlooked the fact that all the tissues subjected to the action of this partial vacuum must suffer a proportionate congestion as certainly as the skin under a cupping-glass. From congestion to hypersecretion is but a single step, and here I think we have a key, not only to the persistence of the discharge in many cases, but to the prompt abatement of it which often follows relief of the stenosis. The fifth indication, relating to direct applications to ulcerated points when practicable, should discourage the use of strong

irritating solutions, sprays or powders to the whole mucous surface, in order to heal ulcerations of a limited portion of it. The sixth indication, as to hypertrophied glandular tissue, requires a discrimination between that which produces hypersecretion and that which does not. The former should always be removed, the latter never less it obstructs nasal breathing, which would bring it under the fourth head. If the preceeding indications have been fulfilled, the one relating to the use of astringents and sedatives will seldom be present for any lengthened period. Still their use for a limited time will often hasten the return of the vessels to their normal calibre. As to the value of constitutional treatment in non-specific cases, nothing is as yet definitely settled. The last indication is far from being the least important. Continuing random, local treatment may perpetuate the disease indefinitely, and when the cure has reached a point at which we no longer know just what we expect our remedies to do, it is time to lay them aside and give nature an opportunity to complete the work.— *Detroit Lancet.*

THE CURABILITY OF UTERINE DISPLACEMENTS.

Dr. Paul F. Munde, of New York, finding that the text books either entirely omit all mention of the possibility of permamently curing displacements of the uterus by any of the methods in use, or give but vague statements on the subject, and impressed with the importance of having some positive conclusions on the matter, both for the sake of the patient and the satisfaction of the physician, in a paper presented to the London Congress has analyzed the numerous cases of displacements which have come under his care (895), and arrives at the following conclusions:—

1. Displacements of the uterus are permamently curable in the large majority of cases only when recent, or when a complete tissue metamorphosis, as occurs during pregnancy and after parturition, takes place.

2. Chronic cases (of more than a year's standing) are but rarely curable permanently, except occasionally under the last-named cir-

cumstances. Apparent cures reported by some authors and witnessed by many physicians, soon show themselves to have been but temporary.

3. Pessaries form unquestionably the most practical, rational, and, (temporarily), the most efficient means of treating uterus displacements. Cures are but rarely accomplished by them.

4. Medicated, chiefly astringent, tampons, intelligently applied every day by the physician, give the best chances for permanent cure This is particularly true of prolapsus, but holds good for all forms.

5. Electricity, locally applied, deserves more extended application.

6. All methods should be preserved in for months and years before success is apparent.—(*Med. News and Abs.*)—*Ohio Medical Journal.*

Editorial.

TO OUR READERS.

With this issue concludes the first year of our editorial management of the INVESTIGATOR. In looking over the year thus completed we feel that our efforts to supply our readers with interesting and practical matter have not been altogether in vain. While we realize that a monthly periodical of thirty-two pages reading matter is not sufficient in size to thoroughly cover the whole broad extent of medicine and surgery, yet much can be gathered within its limits, and the recompense for the investment of our subscribers becomes manifold. Our aim has been to give that which the experience of physicians seems to prove useful, and not be to exclusive or sectarian in choice of material. The day is nearly gone when men put on the exclusive garb, and another day is dawning when the results of all experience must and will have general expression and become accepted. We hail that day, and herald its coming with joy and thanksgiving. We are already breathing the invigorating atmos-

phere of the new morn, and awakening to the falling beams of the new and rising sun of truly scientific medicine.

Our journalistic position may not be supported by the "pure homœopath" at one extreme, or the "rank allopath" at the other; but between these two extremes stands the great body of the medical profession, whose members are looking in all directions for resources to the art of removing and preventing disease, and it is from this great body, occupying the *medium ground*, as it does, that we receive endorsement and maintenance. Our increasing list of subscribers, and the many letters of approval from all quarters, prove to us the righteousness of our cause, and the demands for our efforts. As in the past, therefore, so in the future, we shall labor to give the combined experience of all schools of medicine, and so far as our space permits will allow the broadest expression, and most cosmopolitan views.

DR. GREGG AND PROF. PASTEUR.

We wish to say a word with reference to the first article in this number of the INVESTIGATOR, and call the attention of our readers to the refutation which Dr. Gregg gives to Prof. Pasteur's theory of chicken cholera and splenic fever. Dr. Gregg denies *in toto* the theory of bacteria, and believes that the so-called living organisms are not such, but are only fibrin in its various changing forms and conditions. He sustains himself by a line of facts and reasoning, that seem to justify his position, and which certainly warrant the consideration of candid minds. The *Medical and Surgical Reporter* of Philadelphia, November 12, 1881, says of Dr. Gregg's writings on Bacteria and Diphtheria:

> A physician of Buffalo, Dr. Rollin R. Gregg, has attacked, what he calls "the great bacteria fallacy," maintaining that the so-called micrococi in the diphtheritic membrane are in reality granules, fibrils and spirals of fibrin. It appears that he has written a book on the subject, which, however, we have not seen. From some expression in the reprints sent us, we judge him to be one of the independent schools of medicine. At any rate, his views deserve consideration. A. A. H.

IS IT WORTH A DOLLAR?

We invite the attention of our readers to the Index found in this number to the contents of the INVESTIGATOR for the past year. The variety and value of the articles which have been published in it during 1881, are a sufficient guarantee that the INVESTIGATOR is doing a good work, and that its future will not be barren of good fruit. With such an amount of matter for ONE DOLLAR, physicians should not only be willing to continue their subscriptions who are already on the list, but those who are not should be desirous of subscribing at once. Who cannot afford ONE DOLLAR for nearly 400 pages of valuable reading! Fill out the blank slip found on another page; enclose the money and forward it to us. You never will be sorry.

CHEAP MEDICAL BOOKS.

Mr. D. B. Bagley, who keeps a fine stock of miscellaneous medical works and sells them at twenty per cent. discount, has received a supply of the following works, bound in paper, which are sold at ten cents a copy:

A Practical Manual of the Treatment of Diseases of the Rectum, by Henry Smith, F. R. C. S.; *Clinical Lectures on the Diseases of Women*, by J. Mathews Duncan, M. D., LL. D., F. R. S. E.; *A Manual of Venereal Diseases*, by Berkeley Hill and Arthur Cooper; *Indigestion and Biliousness*, by J. Milner Fothergill, M. D.; *Diphtheria: Its Nature and Treatment, Varieties and Local Expressions*, by Morell McKenzie, M. D.; *Headaches: Their Nature, Causes and Treatment*, by Wm. Henry Day, M. D., M. R. C. P.

The regular cloth-bound editions of the above works range in price from $1.50 to $2.25. This is a war on Birmingham & Co., of N. Y. It does not take much of a prophet to predict where the victory will be. But it is a good opportunity to get good works for almost nothing.

A. A. H.

ENTERPRISE.

We called a few days ago at Mr. J. H. Matteson's headquarters, 11 East Eagle street, this city, to make a purchase of some medical works; and in our conversation I was surprised at the amount of work he is doing in his subscription and miscellaneous book trade He tells us that within the past thirty days he has ordered over *fourteen thousand volumes*. He says his sales of *Zeimssen's Cyclopædia of Practical Medicine*, alone, have aggregated over $70,000 during his agency for it. This is a vast amount of business. The reason why he does so much is that he represents the best publishers, sells the best works, and looks to the best interests of his patrons, both in their needs and circumstances. He has just received for distribution the first volume of Wood's great publication, *The International Encyclopædia of Surgery*. It is a work that the progressive surgeon *must have*. Mr. Matteson also stated that *Wood's Library of Standard Authors*, for 1882, will excel anything ever published for the money. A. A. H.

Book Notices.

The Science and Art of Midwifery. By William Thompson Lusk, A. M., M. D., Prof. Disease of Women and Children in the Bellevue Hospital Medical College; Consulting Physician to Maternity Hospital; Visiting Physician to the Emergency Hospital; Gynæcologist to the Bellevue Hospital; Fellow of the American Gynæcological Society; Corresponding Fellow of the Obstetrical Societies of Edinburgh and London, etc., etc. 8 vo. Pp. 687.. With numerous illustrations. New York: D. Appleton & Co. Price, $5.00.

For many years obstetrics, as represented by American authorship, has been almost entirely confined to the charmingly written work of the late Prof. Bedford. This work gained recognition by the profession at its first issue, and has held a well-merited popularity up to the present time; but it has "got behind the times," and repre-

sents the status of the obstetric practice of nearly a quarter of a century ago. A few years ago Gurnsey, of Philadelphia, issued his work upon Obstetrics and Diseases of Women and Children, but his readers were comparatively limited, and principally confined to the homœopathic school. The same may be said of a few others who have written for a distinctive class of physicians, or who have compiled and written, not because they had anything new to present, but to give publicity and notoriety to themselves. Hence the present status of American obstetrical practice needed to be presented anew. Prof. Lusk saw this need and for a long time has been engaged in preparing a work to supply it. Although slightly anticipated by an author from the far Pacific coast, yet its issue will be received with hearty welcome and the New York Professor will become the standard authority for years to come, and his work will be used as the leading text book in our American colleges.

Prof. Lusk makes his *debut* very gracefully, and signifies his *purpose* "to present to the reader a fair statement of the changes which have been made by modern investigation in the views entertained respecting the physiology and pathology of pregnancy, labor and child-bed." He writes clearly and concisely, and presents matter that has a practical and scientific bearing, to the sacrifice of historical and controversial questions. He deals briefly and yet sufficiently fully with the physiological anatomy of the female organs; the physiology of the ovum; physiology of pregnancy; pregnancy; labor, its physiology, mechanism, etc.; the puerperal state; the pathology of pregnancy and of labor; obstetric surgery, and the diseases of child-bed. Prof. Lusk is not *verbose* and does not take much space to say little; but he expresses his thoughts in the fewest words, and every sentence has an idea that should not be lost.

The student who wants the best and most recent thought and experience on the subject, the practitioner who wants to keep abreast of the times in obstetric medicine and surgery, should not fail to procure this excellent treatise by the eminent Bellevue Professor.

A. A. H.

The Applied Anatomy of the Nervous System. Being a Study of this Portion of the Human Body from a Standpoint of its General Interest and Practical Utility. Designed for use as a Text Book and a Work of Reference. By Ambrose L. Ranney, A. M., M. D., Adjunct Prof. of Anatomy and Late Lecturer on the Diseases of the Genito-Urinary Organs and on Minor Surgery in the Medical Department of the University of the City of New York; late Surgeon to the Northern and Northwestern Dispensaries; Fellow N. Y. Academy of Medicine; Member of the Medical Society of the County of New York; Author of a "Treatise on Surgical Diagnosis," "The Essentials of Anatomy," etc. 8 vo. Pp. 500. With numerous illustrations. New York: D. Appleton & Co. Price. $4.00.

When it is considered that the nervous system is the most highly developed structure of organic life; that it is the seat of all intelligence, sensation and motion; that it presides over all the operations of life; that it is affected directly or indirectly, generally or locally, by all diseases and injuries; that on the other hand its conditions affect other organs and structures, its study becomes one of the deepest, most subtle, most interesting, yea, most important that can engage the human mind. Lying at the basis of the study of any organism is its anatomy; then follows the study of the action, normal and abnormal, of its parts, both separately and combined. In order to properly understand the operations of the nervous system, either in health or disease, a knowledge of its structure becomes paramount. It is complicated and is, perhaps, in a comparative sense, but little understood even at the present time. But day by day, and year by year, new light is being thrown upon it, new facts are being developed and much more is known of it than at any past period. To keep pace with this increasing knowledge, the student and physician need to have its scattered fragments collected together, systematized, simplified and presented to him in convenient form for study. Dr. Ranney, fully appreciating such need, has undertaken the task, and has performed it faithfully and well. He has done just what he promises, and has given the anatomy of the nervous system and made such applications as may be of general interest and practical utility. He did not purpose entering into the discussion of controversial questions and into the minutest details of the subject, but to write for the student and general practitioner

who wish only for the generalities and accepted facts of the subject. Dr. Ranney's work will let a great deal of light into dark places, and we rejoice at its appearance. The work is profusely illustrated and the publishers have produced it in excellent style. This admirable treatise should be in every medical library. A. A. H.

Lectures on the Diagnosis and Treatment of Diseases of the Chest, Throat and Nasal Cavities. By Fletcher Ingalls, A. M., M. D., Lecturer on Diseases of the Chest and Physical Diagnosis, and on Laryngology in the Post Graduate Course, Rush Medical College; Clinical Professor of Disease of the Throat and Chest, Woman's Medical College; Physician and Surgeon for Disease of the Throat and Chest, Central Free Dispensary, Chicago. 130 Illustrations. 8 vo. Pp. 437. New York: Wm. Wood & Co. Buffalo, N. Y.: B. D. Bagley. Price, $4.00.

A few day ago we received from Wm. Wood & Co., Publishers, New York, a copy of Ingall's *Diseases of the Chest, Throat and Nasal Cavities*, which has given us great pleasure to peruse. It treats of all the diseases in these localities in a very concise manner, which makes it valuable as a reference book for the practitioner and something that will aid the student in brushing up for his final examination, as well as becoming a good text book for him. The description of diseases is all that one could desire, and the cuts, while not elaborate or expensive, seem to produce an indelible impression which cannot be said of all wood cuts in our medical works. The study of the throat and nasal cavity has been very much neglected by the general practitioner, who leaves it for specialists, which is to be regretted. The work contains a little over four hundred pages and is inexpensive. S. N. B.

Eyesight: Good and Bad; Or the Excercise and Preservation of Vision. By Robert Brudenell Carter, F. R. C. S., Ophthalmic Surgeon to St. George's Hospital. Second Edition, with Additions and Numerous Illustrations. 12 mo. Pp. 275. Philadelphia: Presley Blakiston. Buffalo. N. Y.: B. P. Thompson. Price, $1.50.

Mr. Carter has become so well known as an author and surgeon that his name carries with it admiration and a feeling of authority.

Everything he touches is done with the skill of a master. He has written for the profession on his specialty and has commanded a large following. He writes, in the work before us, for the popular reader, and what he says is what will instruct and benefit. Indeed, there is so much information in it, with reference to the eye and vision, and their defects, that many professional readers cannot fail to be interested as well as benefited. He first describes the eye and its appendages, and how a person sees, and what conditions are necessary for perfect normal vision; and then he considers the defects of vision which arise from old age, and abnormal shape of the eye-ball, and tells why and how lenses may correct them. Following this, he deals with weak sight, color-blindness, and concludes with several valuable chapters on the care of the eyes at different ages, in accidents, in poor health, and suggests several contrivances for saving the visual effort. Lastly, he gives some "practical hints on spectacles." We most heartily recommend this work to those who do not care to enter into the technicalities and minutia of "errors of refraction and accommodation" of the eye, but wish to get a general idea of the subject and obtain good and authoritive advice with regard to the care and preservation of vision. A. A. H.

Winter and Its Dangers. By Hamilton Osgood, M. D., of the Editorial Staff of the Boston *Medical and Surgical Journal.* 16 mo. Pp. 160. Philadelphia: Presley Blakiston. Price, paper covers, $0.30, cloth, $0.50.

Ignorance of common hygiene is a fruitful source of many diseases and deaths. "An ounce of prevention is worth a pound of cure," is an old and true adage, and too frequently verified, first, in the fact that many human ailments are wholly avoidable by proper care and precaution, hygienically; and second, in another fact that all available remedies fail or much effort is required to overcome diseases which arise from trivial causes. Works, which impress the public mind with the importance of the "ounce of prevention" and direct where it may be found, are consequently great blessings, indeed.

Mr. Blakiston has, therefore, been doing a great service in putting before the world, in cheap and popular form, such hygienic literature upon various subjects as will enlighten those who so much need this class of information. In issuing the series of the "*American Health Primers*," although not so much "primer" as some may believe, the publisher should have the encouragement of all physicians. "*Winter and Its Dangers*," is a valuable number and is crowded with information which should be possessed by every household. Its several chapters discuss the "dangers arising from errors in dress," "carelessness and ignorance in bathing," "inattention to pulmonary food," "danger from overheated air," "indifference to sunshine," "sedentary life and neglect," "dangers of school-life in winter," "winter amusements," etc. Physicians should recommend such works as this. A. A. H.

Special Pathology and Diagnostics with Therapeutic Hints. By C. G. Raue, M. D. Second Edition, rewritten and enlarged, 8 vo. Pp. 1072. Philadelphia and New York: Boericke & Tafel. Price, $7.00.

The external appearance of this book is unexceptionable,—it is a model of the book-maker's art. The type, paper and binding are all of the very best. The publishers, no doubt, intended to dress the matter as they thought it deserved.

On giving the work a careful examination we find that the quality of the author's work corresponds with that of the publishers, and is of the best kind. It is really a compendium of the diseases of the human system, including those usually delegated to surgical treatises, giving their symptoms, pathology and "therapeutic hints." Indeed, the author endeavors to cover so much ground that too much brevity might be the criticism that many would pass upon it. But when the skill of the author in condensing, without eliminating, is appreciated, such brevity will only be the more welcome. A vast amount of material is compressed within its pages. The author has gleaned from all the most reliable sources in revising his pathology and "diagnostics," and from the best homœopathic sources in arranging and re-

arranging his "therapeutic hints," and the first edition of 644 pages has grown in the second to 1070 pages.

The work as a whole stands as the best exponent of the homœopathic practice of medicine, as it is being taught at the present time. We know of none equal to it of its kind in homœopathic literature. Raue, in the first edition, has long been before the profession, and has been regarded as one of *the* authorities. In this enlarged and improved edition, he will continue to be known in the years to come, and known, too, as one of the *best* authorities.

A. A. H.

Diseases of the Nervous System. Being a treatise on Spasmodic, Paralytic, Neuralgic and Mental affections. For the use of students and practitioners of medicine. By Charles Porter Hart, M. D. 8 vo. Pp. 409. Philadelphia and New York: Boericke and Tafel. Price, $3.00.

Several works on diseases of the nervous system, of most excellent character, have emanated from the medical press during the last few years. But none are more worthy than this, although it is written by a professed homœopath. Its clear, easy style, its comprehensiveness and thoroughness, its concise and practical character render it applicable to the wants of students and practitioners. Its pathology is fully abreast with the times and all its departments are complete and full. The treatment of the various diseases is considered homœopathic, but the author often steps out of the realms of small doses and recommends standard allopathic remedies, and a line of treatment that would be objectionable to the "pure" homœopath. The treatment is considered in a novel but highly commendable manner. The indications are first given, and then follow illustrative cases in which certain remedies have proven *successful.* Unlike most homœopathic writers the author does not parade a multitude of remedies for each disease, but makes a few appropriate leading selections which do away with that confusion which is particulary felt by readers not familiar with homœopathy.

This is really a choice work, and cannot fail to please all who may be interested in the subject of which it treats. Let physicians of all schools read it. It will enlighten as well as interest. A. A. H.

Transactions of the American Homœopathic Ophthalmological and Otological Society. Fifth Annual Meeting, at Brighton Beach, N. Y., June 15 and 17, 1881. 8 vo. Pp. 80. Buffalo, N. Y.: F. Park Lewis, M. D. Price, $0.50.

This is an interesting volume of essays upon subjects relating to the eye and ear. Dr. Norton contributes a paper on the Value of Jaborandi in Ophthalmic Therapeutics; Dr. Wanstall on Periodicity in Aural Disease; Dr. Brown on Strictures of the Lachrymal Passages; Dr. Beebe on Exophthalmic Goitre; Dr. Houghton on Cotton as an Artificial Membrane Tympani; and others furnish papers equally as interesting. Dr. Phillips has an excellent paper on Gelsemium in Hyalitis and Choroiditis. A. A. H.

The Medical Record Visiting List, or Physicians' Diary for 1882. Arranged for 30 and 60 patients a week. New York: Wm. Wood & Co. For sale by B. D. Bagley, 11 East Eagle St., Buffalo, N. Y. Price for the 30 patient list, $1.25. Price for the 60 patient list $1.50.

Wm. Wood & Co. offer a list that is most elegantly bound in morrocco and gilt, and is admirably suited to the wants of the physician. It is one of the most complete published. It is suited for daily record of patients and visits, for special memoranda, for consultation, for record of obstetric practice, for record of vaccinations, for record of deaths, for addresses of nurses, patients and others and for cash accounts. In addition to these, there is much printed matter of great convenience for reference, as is shown by the following table of contents: Comparison of English with metric weights and measures; comparison of the centrigrade and Fahrenheit thermometric scales; table for estimating the probable duration of pregnancy; approximate equivalents of small weights; doses of drugs used for subcutaneous injection; doses of common and rare drugs; drugs suited for atomization, inhalation, doses, etc.; disinfectants; the urine, its amount, color, odor, chemical analysis, etc.; poisons and their antidotes; emergencies; Lister's antiseptic solutions; treatment of asphyxia from various causes, etc. A. A. H.

Walsh's Physicians' Call Book and Tablet. Washington, D. C.: Ralph Walsh, M. D. Price, $1.50.

This is a very convenient "physician's visiting list." It is neatly bound and its contents are well adapted to the wants of the practitioner. Its printed matter is carefully selected and gives just what is needed in emergencies and at the bed side. There are also blanks for obstetrical, vaccination and death records, as well as for daily visits, nurses' addresses, "cash received," etc.

Walsh's Physicians' Handy Ledger. Washington, D. C.: Ralph Walsh, M. D. Price, 600 Patients, $3.50; 1,200 Patients, $6.00.

This ledger is a companion to the *Call Book*, and is a new and convenient device for easily keeping physicians' accounts. Physicians should send for sample pages which show at a glance the style and arrangement. The author has done a great service in thus simplifying and making easy a hard and tedious task.

News and Miscellany.

WALSH'S RETROSPECT, for October, contains much interesting matter pro and con with regard to President Garfield's case. The *North American Review* also has a "symposium" on the case, written by Drs. Hammond, Ashurst, Jr., and others. All of these taken with the statements of Dr. Boynton, furnish the profession with a contradiction of views and statements, from which a variety of conclusions will be derived. This whole literature shows how at variance men are when considering questions which are related to the operations of that mysterious force called *life*.

RESPONSIBILITY.—A blessing at any time, but specially now, when the medical profession are often made to bear the blame for the use of vile nostrums advertised over their recommendations. Dr. T. A. Ashby, editor of the *Maryland Medical Journal*, Baltimore, Md., writing, says that he has thorough confidence in the Powell Manufacturing Co., of this city, Manufacturers of the POWELL'S BEEF

COD LIVER OIL AND PEPSIN, (a superior tonic, nutritive and digestive), when they say they will give their preparations exclusively to the profession and will not advertise it as a patent medicine. To quote Dr. Ashby's exact words, "I am well acquainted with Mr. Powell, and know him to be a conscientious and upright gentleman, and perfectly square in his dealings and truthful in all his statements. He will make no representation which is not backed by facts."—*Journal.*

THE MEDICAL PROFESSION are under the greatest obligations to the enterprising Detroit firm of Parke, Davis & Co., for their indefatigable efforts in introducing new remedies and preparations. They have brought forward many remedies of undoubted efficacy, and are still in search, at great expense, for others. Such efforts should be encouraged. Their goods, which are of great variety, are reliable and physicians will not be disappointed in their use. MR. TIBBS, of this city, keeps them in his stock.

FOR RELIABILITY of manufacture and excellence of quality, *Reed & Carnrick's* goods are unexcelled. We have used their Maltine preparations for years and find them as represented. Their other goods are also of the best kind and find their way to many thousands of patients through the confidence, recommendation and prescription of physicians.

OUR FRIEND, Mr. W. H. Tibbs, has recently put in a full stock of surgical instruments, which he offers to practitioners upon the most reasonable terms. He also keeps the best kinds of pharmaceuticals and drugs, and the various mechanical appliances for deformities, hernias, etc. His goods are for sale both at wholesale and retail. Physicians desiring goods and the attention of a *gentleman* should apply to Mr. Tibbs. See his advertisement.

LACTOPEPTINE has been so long before the profession that its reputation as a reliable preparation for the relief of indigestion and the disorders arising from it, needs no words of praise from us. Yet we wish to say that we regard it as almost indispensable in cases where such a remedy is indicated, as in Cholera Infantum, Dyspepsia, Vomiting in Pregnancy, etc.

WE DESRE to call the attention of physicians to the reliable preparations of the *Wm. S. Merrell Chemical Co.*, which are advertised on another page, and which are for sale by W. H. TIBBS, of this city. Our physicians here have been testing their virtues, recently, and pronounce them unexcelled by any in the market. The care and discrimination with which they are prepared, commend them to the profession,

MR. B. P. THOMPSON is a new-comer to this city and has taken up the medical book trade at 600 Main street. He keeps a fine assortment of standard medical works, and offers them to the profession at a very liberal discount.

OUR READRES will not forget that Dr. Appleby, whose advertisement will be found on another page, has one of the best Homœopathic Pharmacies in the state, outside of New York City. Mother tinctures of the best quality, homœopathic preparations and medical books may always be obtained at his place, No. 18 West Eagle street, on favorable terms. And in pocket, hand and buggy medicine cases, he has the best assortment and prices in the State. We speak from our own knowledge. S. N. B.

DR. E. M. HARTWELL says that the first recorded post mortem examination made in America was done August 8, 1670. Its record is found in a manuscript order of the Council of Lord Baltimore, dated at St. Mary's in Maryland.

WASHINGTON has been the birth place of a first-class row among the doctors attending the President. 'Tis a piety 'tis true, and true 'tis pitiful. With Candarango Bliss in the matter, it is difficult to see how it could have been avoided.

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